

**LIGHTWALL 3440/3450®**  
INSTALLATION OVERVIEW



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## INTRODUCTION

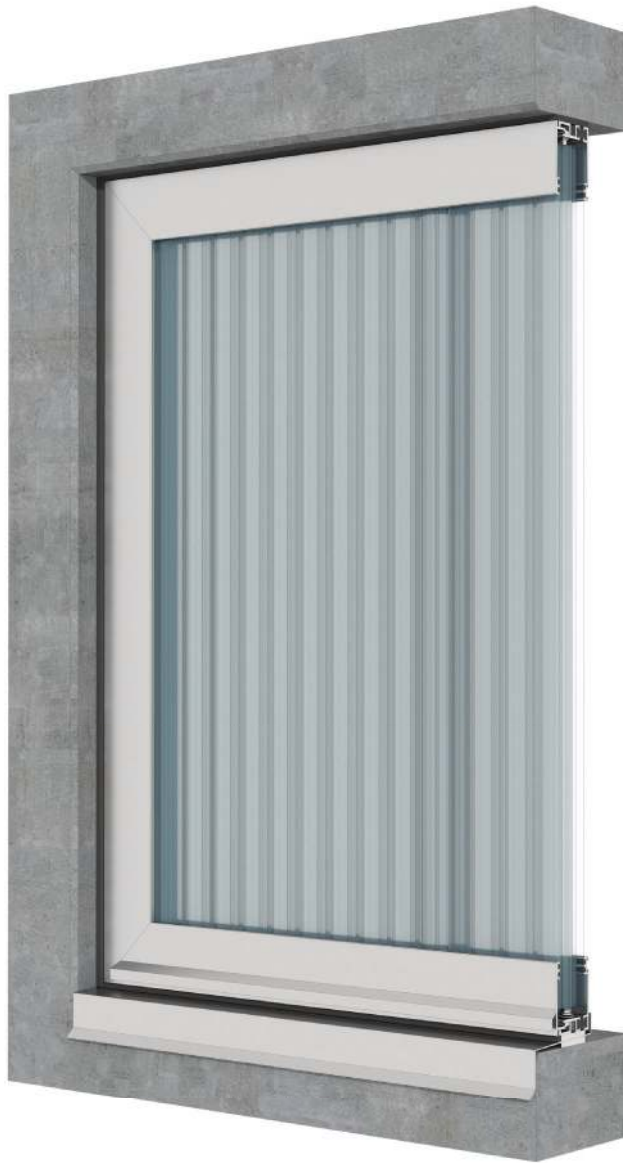
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LIGHTWALL® 3440 / 3450 is a heavy-duty translucent wall and window system designed for new construction and retrofit applications.

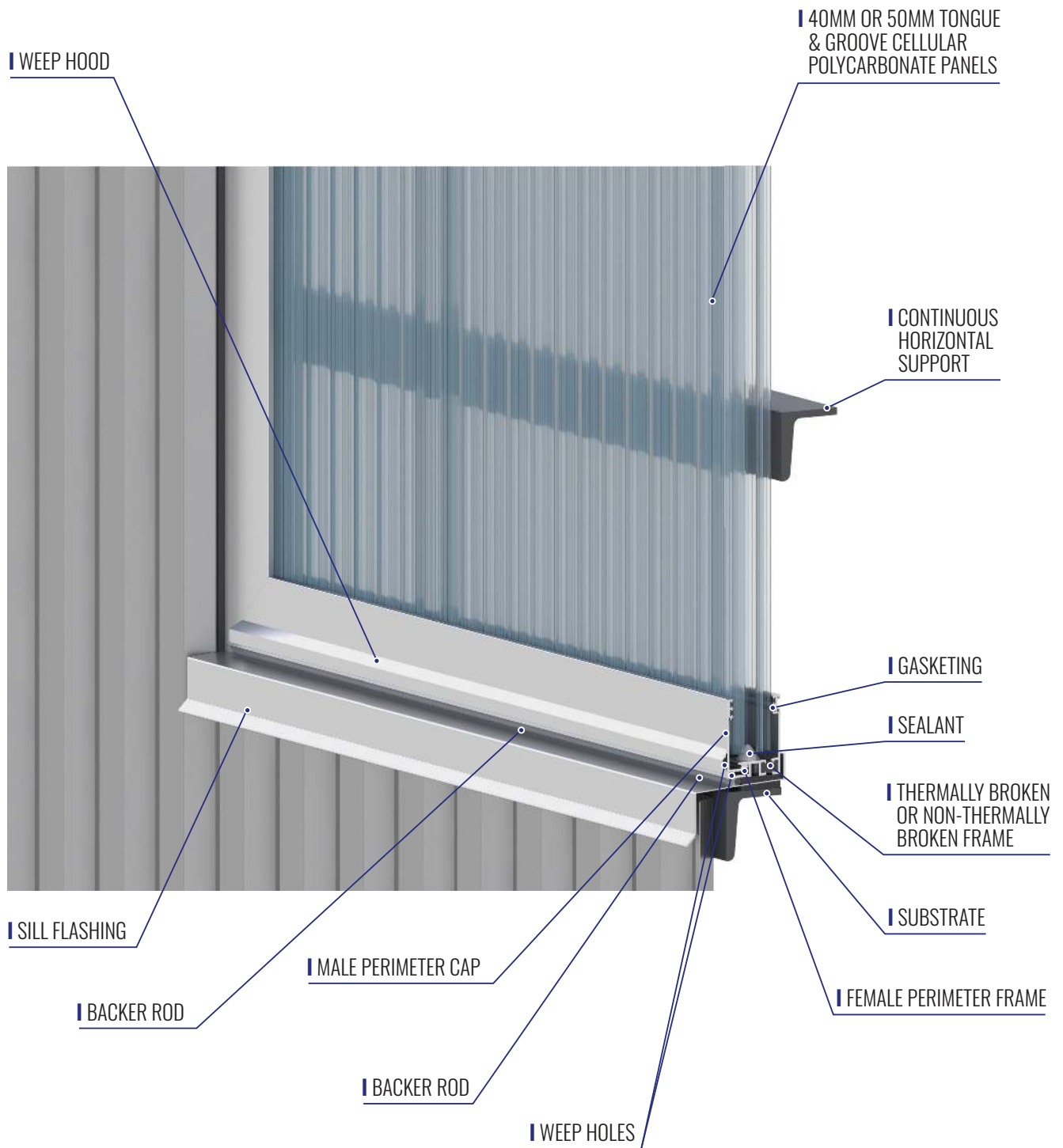
These Instructions provide an overview of a typical LIGHTWALL® 3440 / 3450 installation. Please refer to

project specific installation drawings for dimensions, configuration and installation notes that may be unique to your project.

If you have any questions regarding installation, please call EXTECH technical support at **1-800-500-8083**.



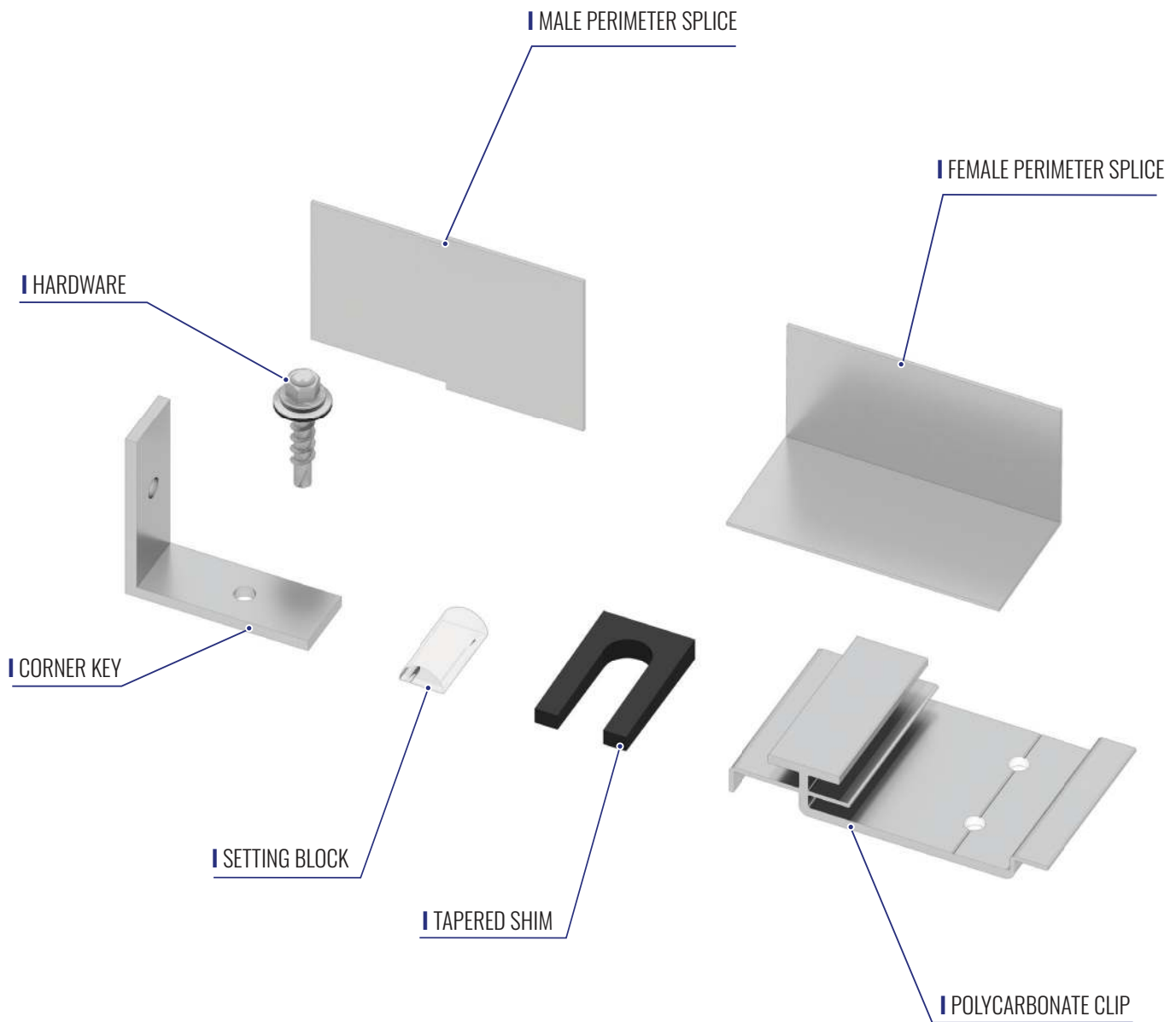
# SYSTEM OVERVIEW



## 3440 COMPONENTS

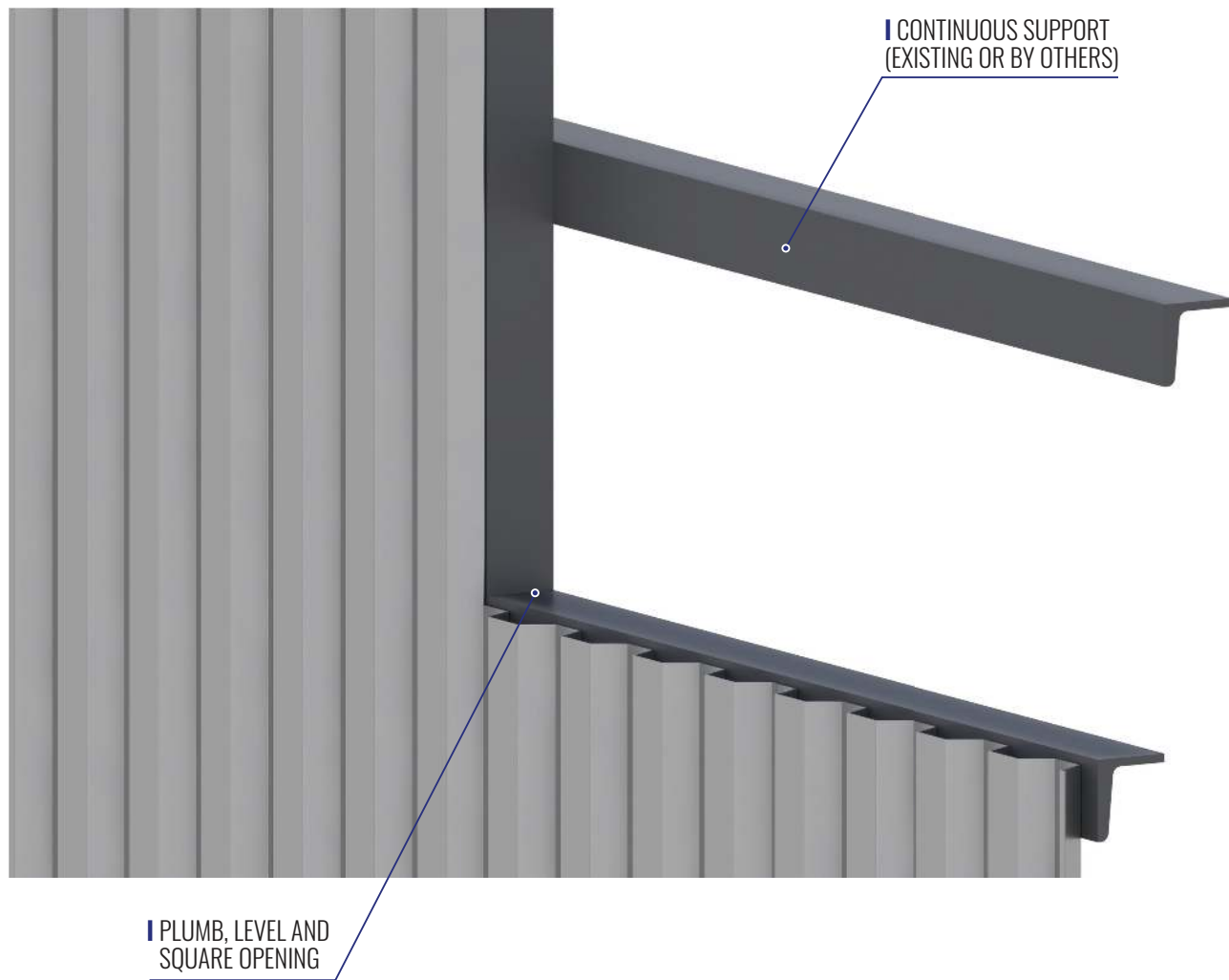
EXTECH offers a variety configuration and building attachment methods for the LIGHTWALL® 3440 / 3450 systems and your particular configuration may not be represented exactly by this diagram.)

LIGHTWALL® 3440 / 3450 System Components.



## STEP 1: PREPARE FOR INSTALLATION

- Review your project specific installation drawings prior to starting.
- If you are replacing an existing glazing system, remove it completely and clear the opening.
- Ensure that the opening is plumb, level and square.
- If required, install any additional continuous support. This is typically required when the opening is greater than 6' tall and depending upon the project loads.
- In new construction, head flashing may be provided by your building supplier. In a retrofit situation, or if it is not provided, install the head flashing.

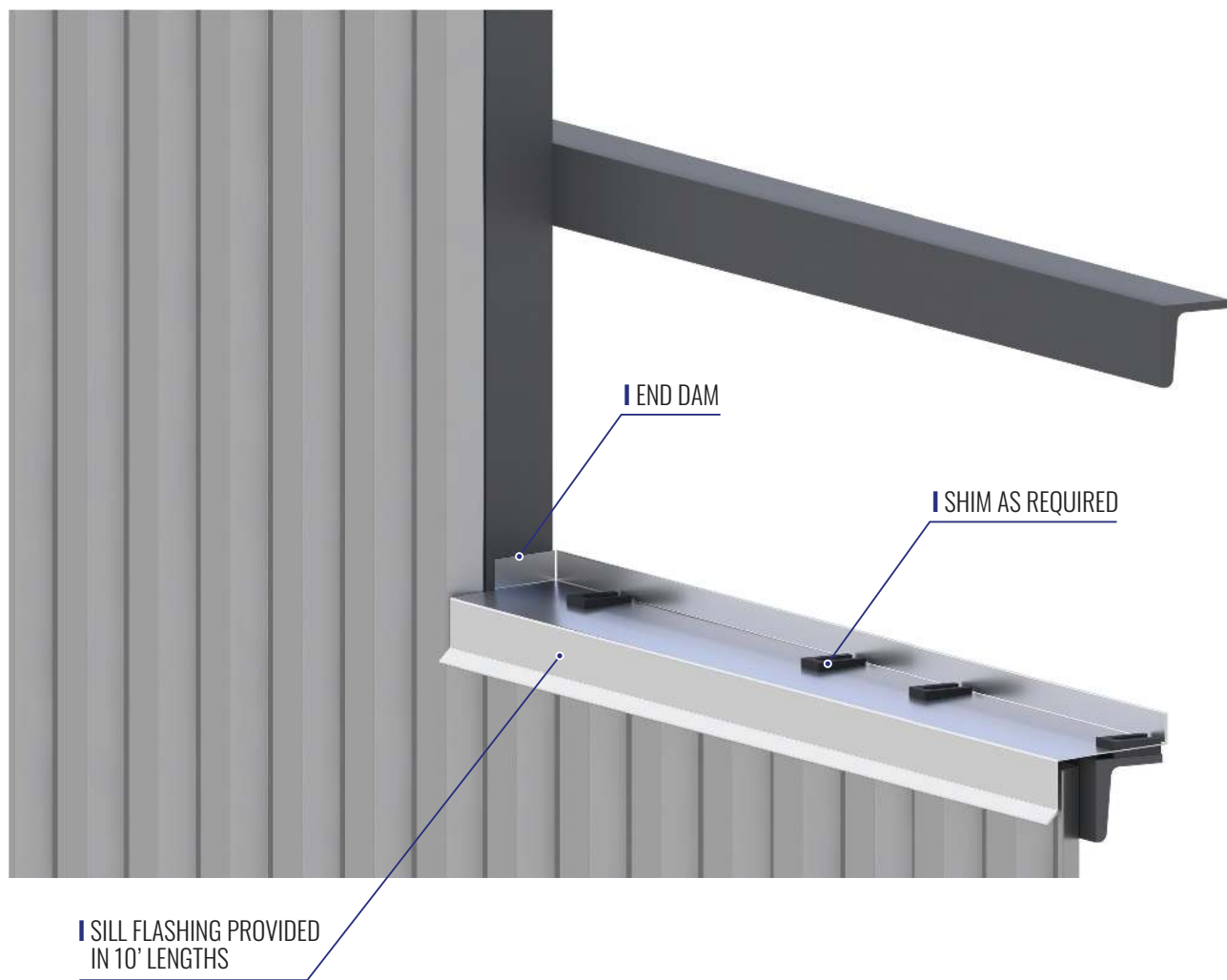


*Note: Your project may require a different system configuration or a different installation sequence and could vary from the steps shown in these instructions. Please make sure to review project shop drawings before starting installation.*

## STEP 2: SILL FLASHING

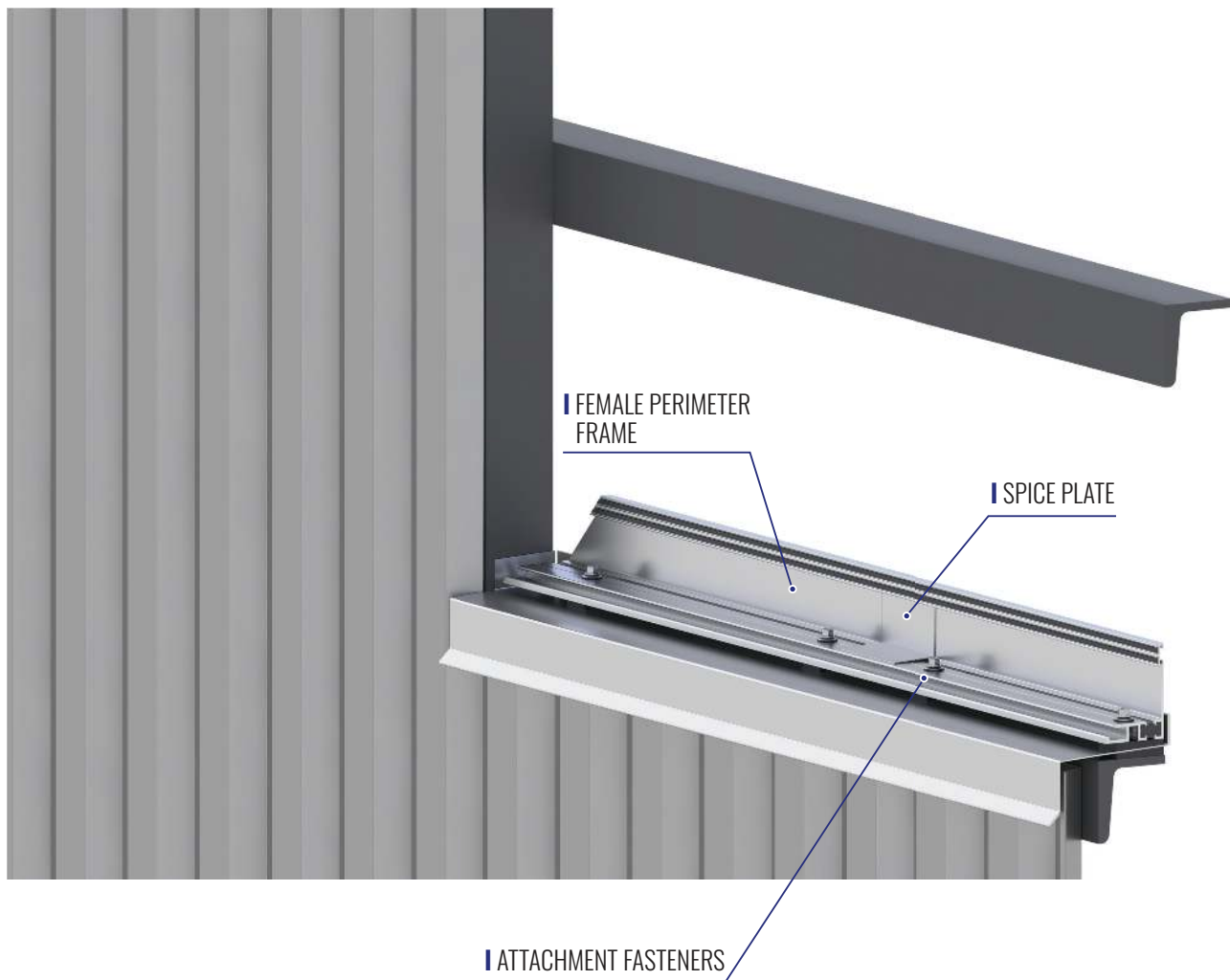
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- Install shims as required.
- Install the Sill Flashing.
- Use shims to level the perimeter frame that is installed in the next step.



## STEP 3: SILL PERIMETER FRAME

- Secure the perimeter frame to the structure using appropriate attachment fasteners.
- At all female perimeter framing joints, embed splice plate in sealant.
- Follow the project specific installation instructions for fastener and sealant placement recommendations.



*Note: Your project may require a different system configuration or a different installation sequence and could vary from the steps shown in these instructions. Please make sure to review project shop drawings before starting installation.*

*Note: Ensure that the frame is plumb, level, and square. Adjust the shims under the frame if necessary.*



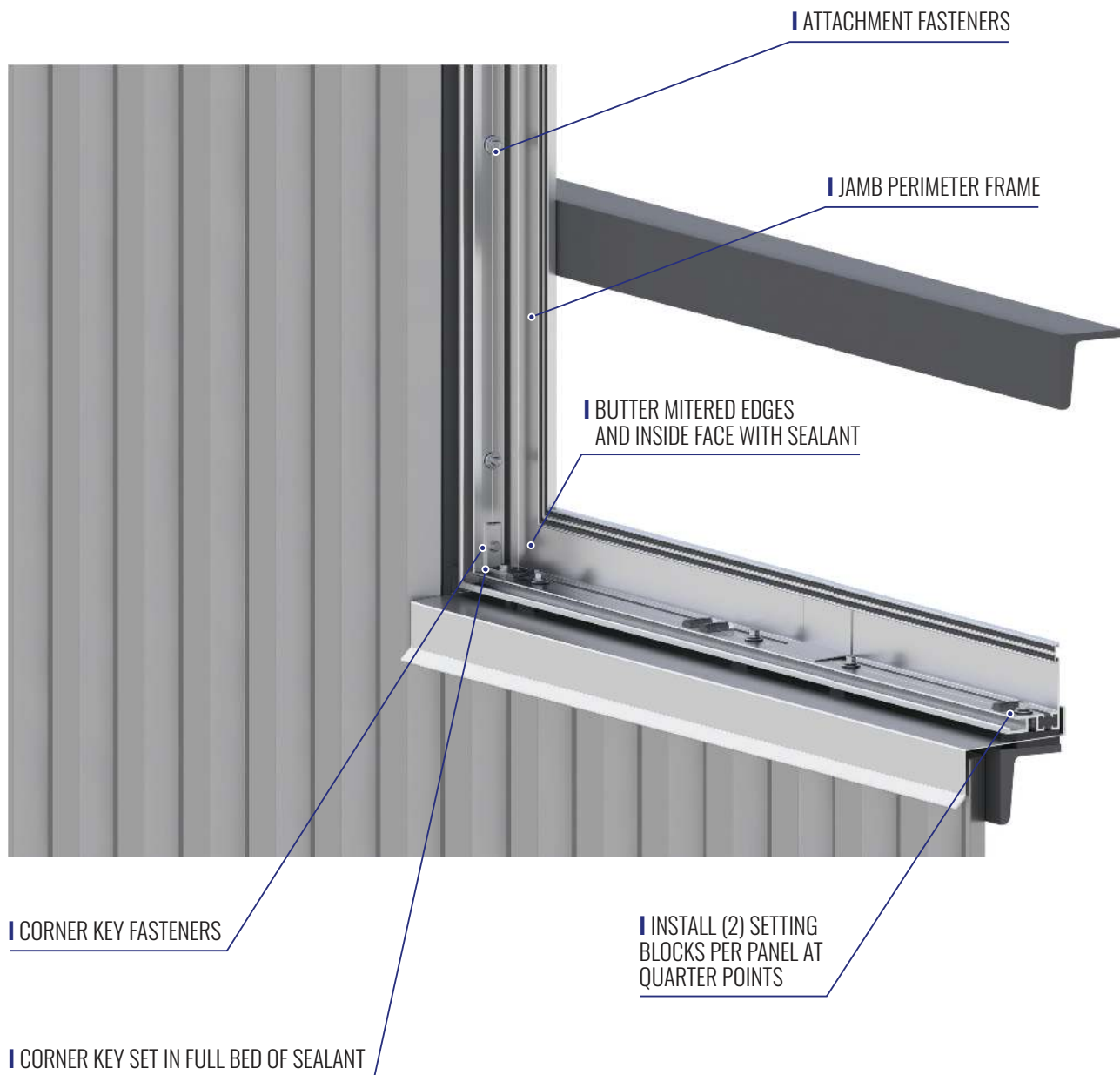
## STEP 4: CORNER KEYS

- Install jamb shims as required to keep the mating jamb female perimeter frame in position with the sill perimeter frame.
- At corner miters, install corner keys using the supplied corner key fasteners.
- Ensure that the corner key is set in a full bed of sealant.



## STEP 5: JAMB FRAMES

- Ensure that the miter fits properly. Shim the jamb frame into position as necessary.
- Apply a liberal bead of silicone on the inside of mitered joints at both the head and sills.
- Fasten the corner key to the jamb frame using the supplied corner key fasteners.
- Ensure that the corner key is set in a full bed of sealant.
- Install setting blocks (2 per glazing panel) at quarter points.



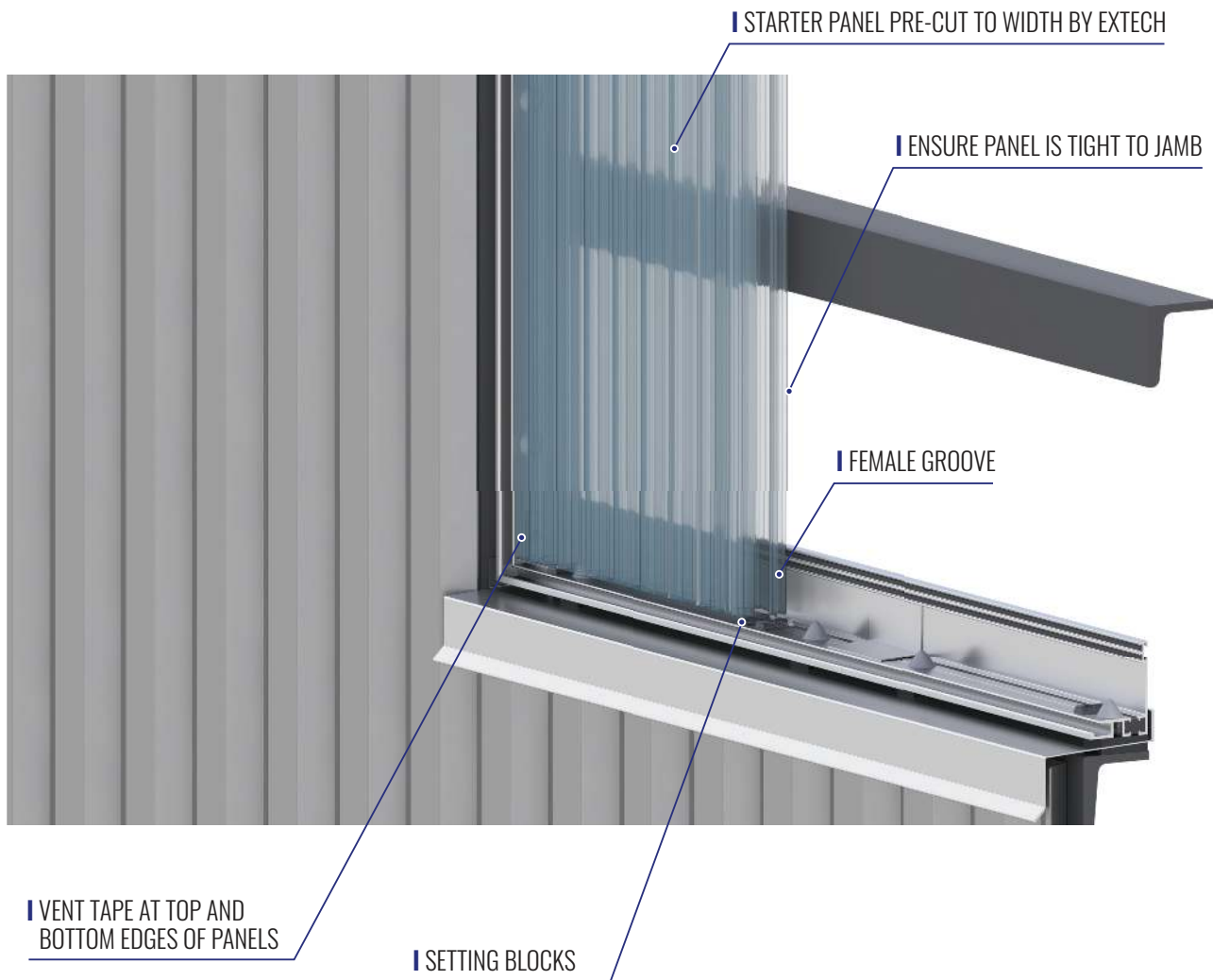
## I STEP 6: COMPLETE THE PERIMETER FRAME

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- Continue installing the perimeter frame in the remaining jamb and head locations.
- Set a corner key in a bed of sealant and install a liberal bead of sealant at all mitered intersections.
- Continue to follow the project specific installation instructions for sealant and fastener recommendations.

## STEP 7: STARTING PANEL

- Install the first panel into the framework.
- Carefully follow the project specific installation instructions. The starter panel may be a full panel, may be a panel pre-cut to a smaller width, or may require field cutting to size.
- Make sure that the vent tape is applied at the top and bottom of the panel. (In most cases, this comes factory applied).
- Force clip tight to panel.



*Note: It may be necessary to apply vent tape on panels that are field cut to length. Vent tape is NOT necessary on the vertical edges of panels.  
Note: The “groove” side should be facing out so that the next panels “tongue” can slide in.*



*Warning: Be sure to place the panel with the “UV Protected” side towards the exterior. This should be clearly marked on the panel peel-coat.*

## STEP 8: GLAZING CLIPS

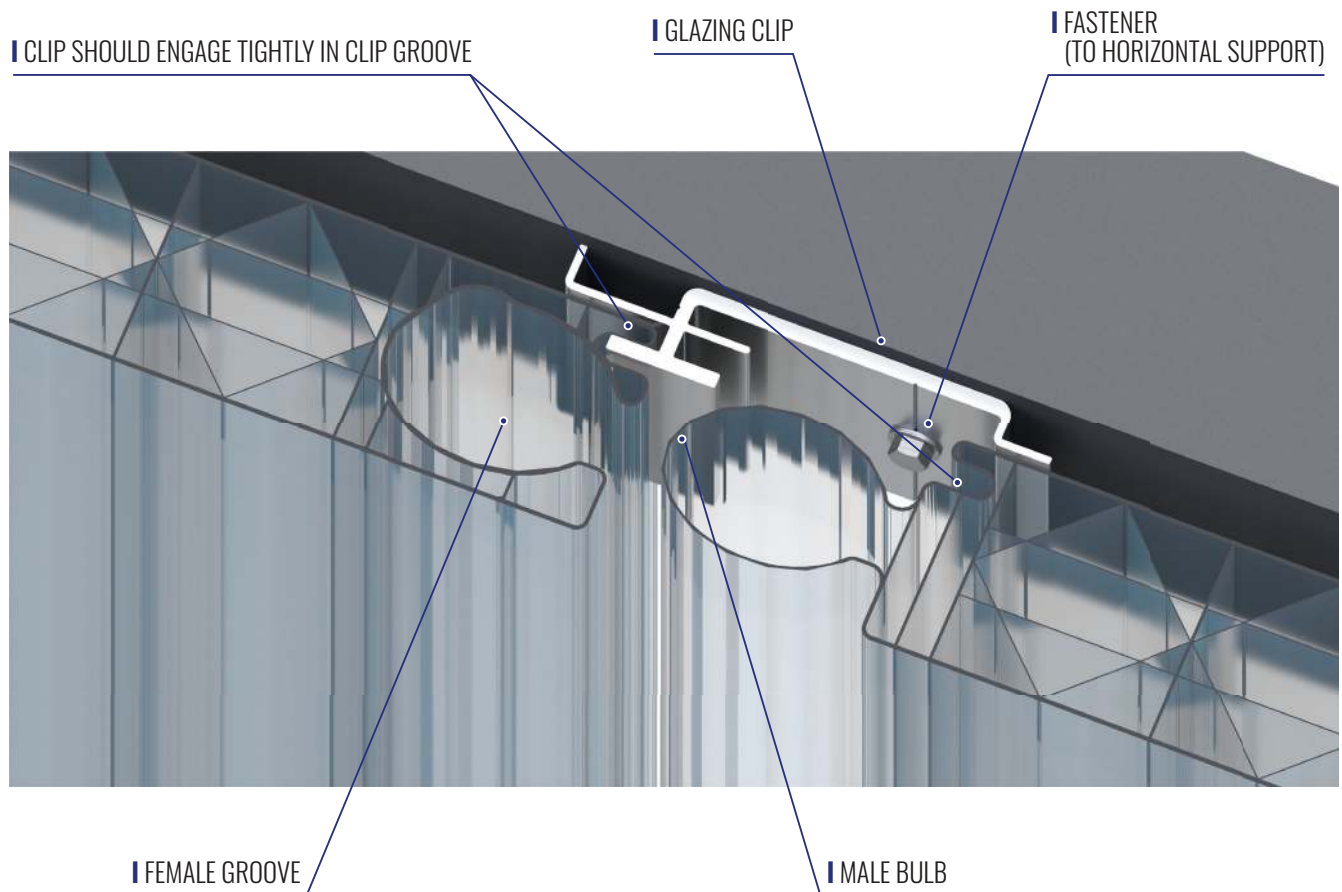
- Install glazing girt clip if applicable (typically for openings taller than 6').
- Ensure the panel is tight to jamb.
- Glazing clips should be inserted into the slot on the back of the panel.
- The glazing clip **MUST** be forced against the panel to ensure there is no 'play' between the clip and the adjoining panel.
- Fasten glazing clip to the horizontal support with fasteners. Some simple span installations may not require clips.



*Note: Installing Temporary spacers as shown may help to locate the first panel to the proper starting dimension, as indicated on the project specific installation instructions. Spacers **MUST BE** removed when all panels are installed.*

## STEP 9: MATING PANEL

- The mating panel is set in the framing opening by fitting the panel tongue into the adjoining panel groove.
- Snap the panels into place.
- Ensure that the clip groove of the second panel firmly engages the glazing clip.



*Note: It may be necessary to CAREFULLY impact the panel with your palm or using a soft mallet AND CAUL to snap the panel into place. The caul (wood block or 2X4 scrap) should be at minimum 3" wide and 12" long. If extreme difficulty is encountered inserting the tongue into the groove, a small amount of mildly soapy water may be used to lubricate the tongue.*



*Note: Remove the protective plastic peel-coat from the exterior side of all panels immediately following installation of the panel.*

## STEP 10: ADDITIONAL PANELS

- Ensure that the second panel mates tightly with the first. The panels should fit tightly and there should not be excessive gaps.
- Repeat steps 8-9 until all panels are installed.
- Apply sealant to the perimeter of the opening according to the project specific installation instructions.



ENGAGED PANEL

INSTALL BACKER ROD  
AND SEALANT



*Note: It may be necessary to rip cut the final panel to width. The polycarbonate panels can be cut with a standard circular saw using a fine-tooth blade. Make sure to leave the protective peel-coat plastic in place until after cutting to avoid scratching the panel.*

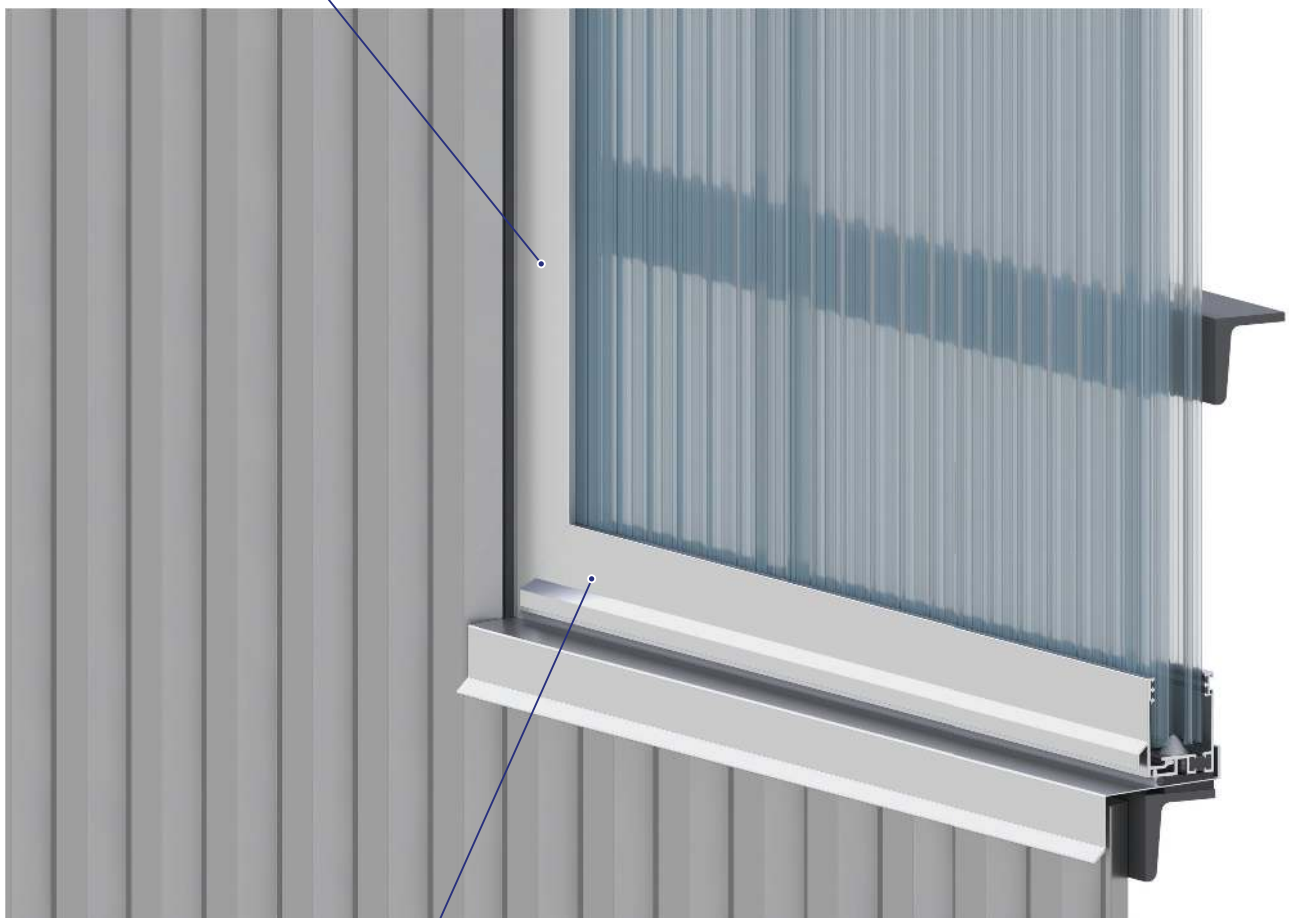


*Warning: Be careful NOT to inadvertently block the weep holes with sealant.*

## STEP 11: PRESSURE CAPS

- Once the panels are installed, snap the male jamb and sill pressure caps into place, ensuring that all miters fit tightly.

MALE JAMB PRESSURE CAP



MALE SILL PRESSURE CAP  
(WITH WEEP HOOD)



## STEP 12: CLEANING AND MAINTENANCE

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### I After Installation and future cleaning:

- Panels should first be hosed off thoroughly with a medium spray of lightly pressure washed to remove any abrasive surface material.
- If desired, after removing surface debris, wash the panels with mild soap or detergent and lukewarm water using only a clean, soft sponge or cloth.
- Continue to gently wash to remove any remaining grime.
- DO NOT SCRUB or use brushes or squeegees.
- Rinse the panels with clean water using hose or pressure washer.
- If stains remain, they can likely be removed before drying by rubbing lightly with a good grade of naphtha or isopropyl alcohol followed by a final wash with mild soap or detergent and a final rinse.
- Dry with a clean, soft cloth to prevent water spotting if desired.

### I Compatible Cleaning Agents:

- Joy
- Palmolive Liquid
- Mild Hand Soap
- Isopropyl Alcohol

### I Incompatible Cleaning Agents:

- Lysol
- Pinesol
- Butyl Cellosolve
- Strong Petroleum Based Solvents
- Abrasive Detergents

## I CARE AND STORAGE

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- Inspect materials prior to signing for shipment. Photograph any damage or evidence of shortages.
- You must notify EXTECH of any damage or material shortages within **48 hours of receipt**. EXTECH cannot guarantee material replacements for damage reported after 48 hours unless EXTECH (solely) deems the available documentation warrants replacement.
- EXTECH is not responsible for any damage caused by improper unloading, storage, handling, or cleaning.
- Rough treatment of the materials may cause damage and may void warranties.
- All materials should be stored in a secure, dry area.
- Materials must be stored off the floor or ground and (if outdoors) covered with heat reflective, breathable tarpaulins.

If you need assistance, please call

**1-800-500-8083**

EXTECH can provide


- Dedicated phone support
- On-site installation startup assistance
- Complete Installation Services






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